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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/797,229	-	03/10/2004	Jeffrey Kao	SIS.0171US (PE-25669-AM)	2976	
21906	7590	09/08/2005		EXAM	EXAMINER	
TROP PRU	NER &	HU, PC	PREVIL,	PREVIL, DANIEL		
8554 KATY	FREEWA	AY				
SUITE 100				ART UNIT	PAPER NUMBER	
HOUSTON, TX 77024				2636		

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
0.55 - 4 - 1 - 1 - 2 - 2 - 2 - 2 - 2		10/797,229	KAO, JEFFREY				
	Office Action Summary	Examiner	Art Unit				
		Daniel Previl	2636				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the c	orrespondence ad	idress			
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D asions of time may be available under the provisions of 37 CFR 1.1.2 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).				
Status							
1) 又	Responsive to communication(s) filed on 10 M	March 2004.					
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
-	Since this application is in condition for allowa		secution as to the	e merits is			
,—	closed in accordance with the practice under						
Dispositi	on of Claims						
4)⊠	☑ Claim(s) <u>1-4</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	Claim(s) is/are allowed.						
6)🖂	Claim(s) <u>1-4</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[	Claim(s) are subject to restriction and/o	or election requirement.					
Applicati	on Papers						
9)[	The specification is objected to by the Examine	er.					
10)	The drawing(s) filed on is/are: a) acc	cepted or b) $\square$ objected to by the ${ t I}$	Examiner.				
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (	under 35 U.S.C. § 119						
	Acknowledgment is made of a claim for foreigr ☑ All b)☐ Some * c)☐ None of:	n priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
	1.⊠ Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Burea						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmen	• •	_					
1) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary					
3) 🔲 Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date		s)/Mail Date nformal Patent Application (PTO-152) 				

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#### **DETAILED ACTION**

Claims 1-4 are presented for examination.

# Claim Objections

1. Claims 1-4 are objected to because of the following informalities: Claims 1, 3, the phrase "adapted to, capable of" is not a positive limitation but only required the ability to so perform. Appropriate correction is required.

Claims 2, 4, are objected for the same reason since they depend from objected claims.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1, 3, are rejected under 35 U.S.C. 102(e) as being anticipated by Ford et al. (US 6,515,857).

Regarding claim 1, Ford discloses a heat sink connected to an electronic device for dissipating heat generated therefrom (col. 5, lines 41-44), heat sink comprising a heat dissipating body having a visible outer surface and a thermochromic dye coated on visible outer surface of heat dissipating body (col. 5, lines

41-67; col. 6, lines 23-37), thermo –chromic dye being capable of changing color in response to temperature change of heat dissipating body (col. 5, lines 44-57).

Regarding claim 3, Ford discloses a power supply (fig. 1) comprising a housing having a visible outer surface and a thermo-chromic dye coated on visible outer surface of housing (fig. 1; col. 5, lines 40-67), thermo-chromic dye being capable of changing color in response to temperature change of housing (col. 5, lines 44-48).

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2, 4, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford (US 6,515,857).

Regarding claim 2, Although, Ford discloses all the limitations in claim 1, but fails to specify that thermo-chromic dye changes color from transparent to red when temperature of heat dissipating body changes from 40 degree C to 80 degree C. Since Ford discloses heat exchange material changes its appearance during operation as temperature varies (col. 5, lines 45-47). So, it would have been obvious to any skill artisan to be precise by mentioning the color changed as transparent to red or by mentioning the heat dissipating from 40 degree C to

80 degree C in order to warn the user if the computer is overheating thereby preventing injury as taught by Ford (col. 5, lines 55-56).

Regarding claim 4, Although, Ford discloses all the limitations in claim 1, but fails to specify that thermo-chromic dye changes color from transparent to red when temperature of heat dissipating body changes from 50 degree C to 70 degree C. Since Ford discloses heat exchange material changes its appearance during operation as temperature varies (col. 5, lines 45-47). So, it would have been obvious to any skill artisan to be precise by mentioning the color changed as transparent to red or by mentioning the heat dissipating from 50 degree C to 70 degree C in order to warn the user if the computer is overheating thereby preventing injury as taught by Ford (col. 5, lines 55-56).

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hu et al. (US 6,146,031) discloses method and apparatus for controlling a thermal printer head.

Conner (US 5,985,381) discloses methods for increasing a camouflaging effect and articles so produced.

Hojyo (US 5,559,364) discloses a leadframe.

Bailey et al. (US 5,751,316) discloses a thermal ink jet printhead with ink resistant heat sink coating.

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Gottlich et al. (US 5,932,869) discloses promotional system with magnetic stripe

and visual thermo-reversible print surfaced medium.

Nakagawa et al. (US 5,502,967) discloses color variation inducing device.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel Previl whose telephone number is (571) 272-

2971. The examiner can normally be reached on Monday-Thursday. The examiner can

also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Previl Examiner

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DP

September 2, 2005.

JEFFERY HUPSASS SUPERVISORY PATENT EXAMINER

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